



## Filing Receipt

**Received - 2022-01-13 01:51:20 PM**  
**Control Number - 52667**  
**ItemNumber - 37**

**DRAFT**  
**PUC Project No. 52667 Report**  
**Lake Conroe**  
**MidSouth Electric Cooperative**

**A report to the Public Utility Commission of Texas**

### **1. Project Background and Description**

“Section 6 of House Bill 4150 requires any electric utility, municipality owned utility, or electric cooperative that owns a transmission or distribution line over a lake listed in PURA § 38.004(b) that is not in compliance with the clearance standards of Rule 232 of the National Electrical Safety Code Standard (NESC) ANSI (c)(2) in effect at the time the line was constructed to bring the line into compliance not later than December 31, 2021.”<sup>1</sup>

“To comply with HB 4150, no later than January 14, each electric utility, municipally owned utility, or electric cooperative meeting the requirements of Section 6 of HB 4150 must file, in Project No. 52667, a report.”<sup>1</sup>

### **2. Clearance Requirements**

Per Item 8 in Table 232-1 of the 2017 NESC, the following vertical clearances are to be required over Lake Conroe’s areas on the upstream side of the dam area:

- Neutral Conductor = 42.5 feet
- Open Supply (Primary) Conductor = 45.5 feet

Note: Exceptions 17 and 21 for these areas define the given level these clearances are to be measured from. Exception 17 states, “For controlled impoundments, the surface area and corresponding clearances shall be based upon the design high-water level.”<sup>2</sup> The interpretation of this exception is understood to refer to the top of flood gate elevation as the base line to set the vertical clearances from. Exception 21 states, “Where the U.S. Army Corps of Engineers, or the state, or surrogate thereof has issued a crossing permit, clearances of that permit shall govern.”<sup>2</sup> The interpretation of this exception confirms the understanding of Exception 17; as, Lake Conroe is owned partially (2/3) by the City of Houston and partially by San Jacinto River Authority (1/3) and sets the flowage easement as its base line for clearances. The top of flood gate elevation for Lake Conroe is 202.50 feet.

### **3. Report Requirements and Findings**

The report filed under Project No. 52667 includes the following information:

- “A declaration that each distribution line above one kilovolt owned by the utility that crosses a lake listed in PURA 38.004(b) meets the applicable vertical clearance requirements established in Rule 232 of the NESC Standard ANSI(c)(2).”<sup>1</sup>
- “The date on which the company verified each line's compliance with the applicable NESC Standard.”<sup>1</sup>
  - Findings: See Attachment B
- “For each utility that self-identified a line that did not meet vertical clearance requirements in an annual report filed in either Project 50596 or Project 51890, a declaration that each line identified in the annual report meets the NESC Standard.”<sup>1</sup>
  - Findings: After the analysis of each crossing owned by MidSouth Electric Cooperative on Lake Conroe, it has been concluded that all existing crossings do not meet the required HB 4150 clearances. See Attachment B
- If a line over a lake listed in PURA 38.004(b) does not meet the NESC Standard:
  - The name of line;
    - Findings: See Attachment A and B
  - The name of lake and the county or counties in which the lake is located;
    - Findings: Based on the provided information from the PUC filing on Project No. 52667, this report covers the 25kV electric distribution lines over Lake Conroe that

- are owned and maintained by MidSouth Electric Cooperative. Lake Conroe is approximately 20,118 acres in size and located in Montgomery County. The lake is owned by the City of Houston (2/3) and San Jacinto River Authority (1/3).
- A narrative description of actions the utility will take to bring the line into compliance with the NESC Standard;
    - Findings: MidSouth Electric Cooperative will rectify these crossings to the vertical clearances required by the NESC by doing the following:
      - Confirm the extent of the reconstruction required to meet the NESC clearance requirements:
        - Determine minimum distance below lake bed proposed underground distribution can be installed
        - Determine the vaults and switchgear required to convert the existing overhead distribution line to underground
      - Coordinate with the SJRA to ensure the proposed design changes are in compliance.
    - The date by when the line will be brought into compliance.
      - Findings: Attachment B provides the anticipated design dates of design and construction for each crossing not in compliance.
  - MidSouth Electric Cooperative is in the process of placing the three (3) referenced lake crossings underground.
    - The engineering portion of the project to bring these three distribution lines into compliance was completed and sent to San Jacinto River Authority (SJRA) on May 14th, 2021. SJRA required Surveyor's Exhibits of the proposed underground power line placement, these documents were sent to SJRA on August 31, 2021. A Preliminary Agreement for MidSouth construction on Lake Conroe property was sent to SJRA on October 6th, 2021. A Final Signed Agreement was sent to SJRA on October 21, 2021. An Executed Copy of the Agreement with SJRA was received by MidSouth Electric Cooperative on November 17, 2021. A TxDOT Permit for work to be completed along SH 105 in conjunction with the Lake Conroe crossings was filed on December 10, 2021. MidSouth Electric Cooperative is currently waiting on Approval from TxDOT before assigning this project to a Contractor. Assuming Approval of the TxDOT Permit in January, 2022 construction should be complete by July of 2022.

#### **4. Attachments**

Attachment A (Overall Drawing – Lake Conroe HB 4150) provides the given location of each crossing, and Attachment B (Analysis – HB 4150 Lake Conroe Clearances) provides the concluded breakdown for each crossing.

#### **5. References**

<sup>1</sup> Barksdale English (2021). Project No. 52667. Public Utility Commission of Texas.

<sup>2</sup> 2017 National Electrical Safety Code





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MIDSOUTH ELECTRIC COOPERATIVE

ATTACHMENT A  
LAKE CONROE CROSSINGS  
WO#510072

 **McCord**  
ENGINEERING, INC.  
Texas Registered Engineering Firm F-2664  
916 Southwest Parkway East  
College Station, TX 77840  
(879) 764-8356

SCALE: 1"=400'	DATE: 01-12-2022	DWG NO. MEI-16048	SHEET NO. 1 OF 1
DRAWN BY: JKP	JOB CODE: MS-6-L.25	REV. JKP 01-13-2022	



The following files are not convertible:

HB 4150 Lake Conroe Clearances.xlsx

Please see the ZIP file for this Filing on the PUC Interchange in order to access these files.

Contact [centralrecords@puc.texas.gov](mailto:centralrecords@puc.texas.gov) if you have any questions.

**WORK ORDER NO. 510072**

**FILING OF ATTESTATION DEMONSTRATING COMPLIANCE WITH HB 4150**

**AFFIDAVIT OF OFFICER FOR**

**MIDSOUTH ELECTRIC COOPERATIVE**

**FILED PURSUANT TO SECTION 6 HOUSE BILL 4150**

**STATE OF TEXAS**

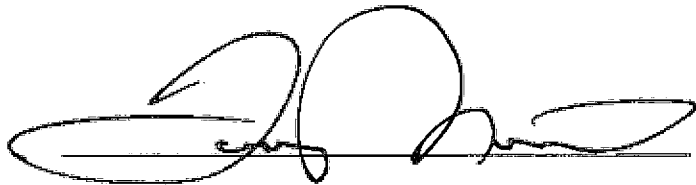
**COUNTY OF MONTGOMERY**

BEFORE ME, the undersigned authority, on this day personally appeared, and who, after being duly sworn, stated on his or her oath he or she is entitled to make this Affidavit, and that the statements contained below are true and correct.

I, Troy Morris, swear or affirm that as an Electric Cooperative operating in the State of Texas and the Electric Reliability Council of Texas (ERCOT) region and control system, confirms the following:

- MidSouth Electric Cooperative operates a distribution utility system in the State of Texas and the Electric Reliability Council of Texas (ERCOT) region and control system;
- MidSouth Electric Cooperative owns (three) distribution lines over a lake listed in PURA § 38.004(b).
- These distribution lines **do not** meet the applicable vertical clearance requirements established in Rule 232 of the NESC Standard ANSI (c)(2).
  - If a line over a lake listed in PURA § 38.004(b) does not meet the NESC Standard:
    - The name of lines;
      - **1) Lake Conroe Crossing Near Villas Way Drive**
      - **2) Lake Conroe Crossing Near Marina Drive**
      - **3) Lake Conroe Crossing Near Lake Point Boulevard**
    - The line is located over; **Lake Conroe in the county of Montgomery.**
    - A narrative description of actions the utility will take to bring the line into Compliance with the NESC Standard; and the date by when the line will be brought into compliance.
- **The engineering portion of the project to bring these three distribution lines into compliance was completed and sent to San Jacinto River Authority (SJRA) on May 14<sup>th</sup>, 2021. SJRA required Surveyor's Exhibits of the proposed underground power line placement, these documents were sent to SJRA on August 31, 2021. A Preliminary Agreement for MidSouth construction on Lake Conroe property was sent to SJRA on October 6<sup>th</sup>, 2021. A Final Signed Agreement was sent to SJRA on October 21, 2021. An Executed Copy of the Agreement with SJRA was received by MidSouth Electric Cooperative on November 17, 2021. A TxDOT Permit for work to be completed along SH 105 in conjunction with the Lake Conroe crossings was filed on December 10, 2021. MidSouth Electric Cooperative is currently waiting on Approval from TxDOT before**

assigning this project to a Contractor. Assuming Approval of the TxDOT Permit in January, 2022 construction should be complete by July of 2022.

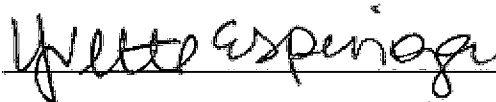
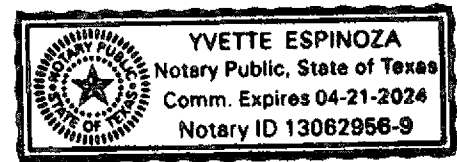


{Signature of Officer of the Cooperative}

Senior Vice President

MidSouth Electric Cooperative

Sworn and subscribed before me on this 11th day of January 2022



Notary Public in and for the State of Texas

Notary Seal

(Must be notarized by a notary public in and for the State of Texas)